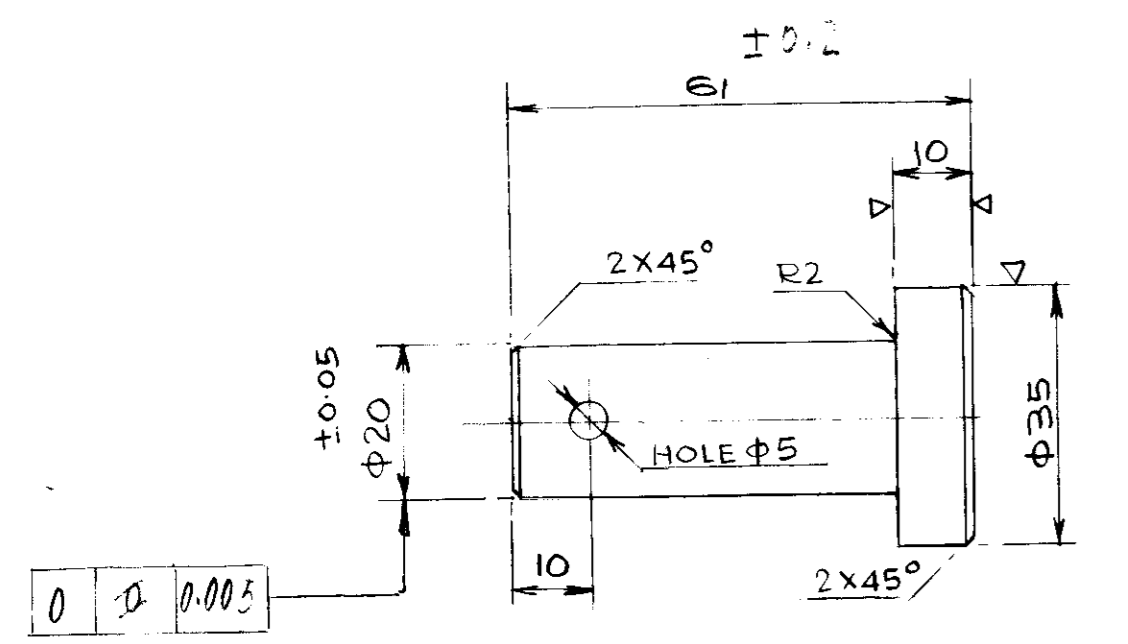


167.001(N)100.056

ALL OVER



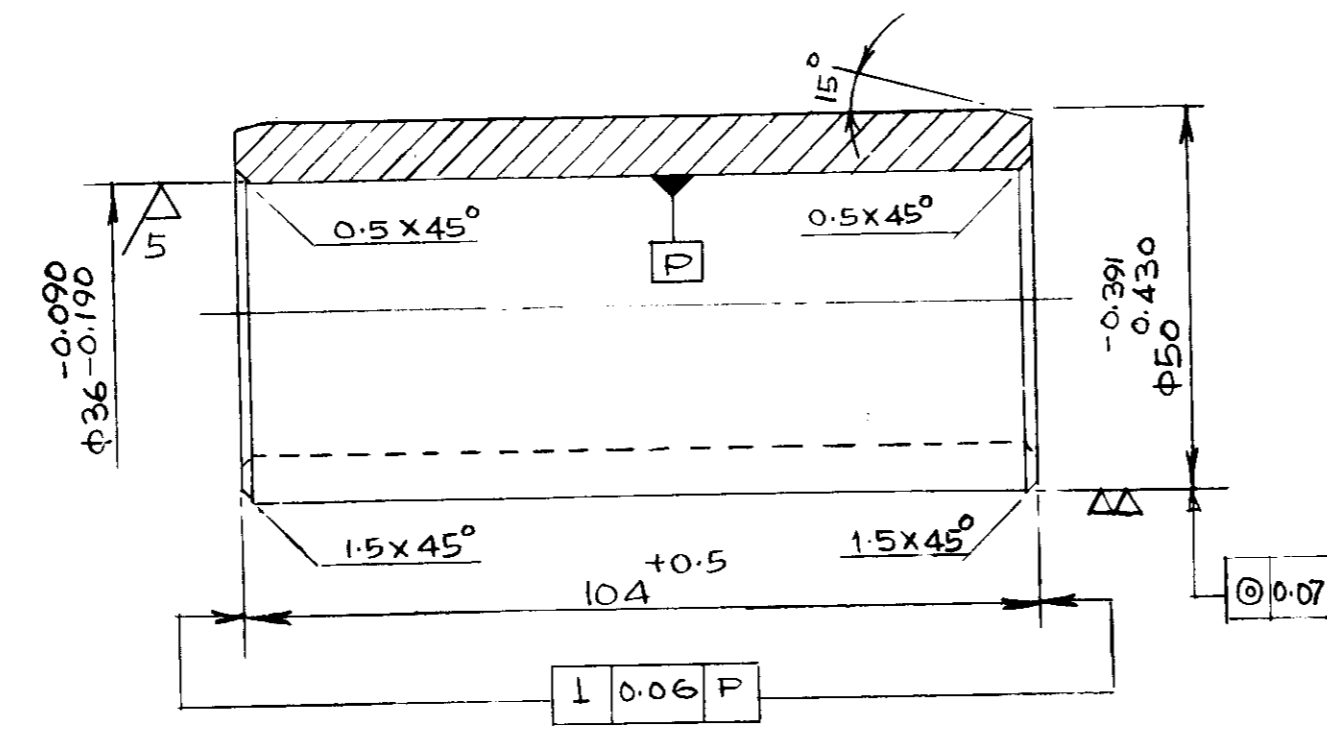
TECHNICAL INSTRUCTIONS

1. SHARP EDGES TO BE ROUNDED OFF.
2. ITEM TO BE HARDENED & TEMPERED TO HB 180-220.

POS NO	DESCRIPTION	QTY	UNIT WT	MATERIAL	G.A. DRG No	SC	DRG. NO
10	PIN $\phi 20$ L=61	52	1.15	45C8 IS:5517-93	167.001(N) 00.065	1:1	167.001(N) 00.056

167.001(N)100.057

FOR THE REST

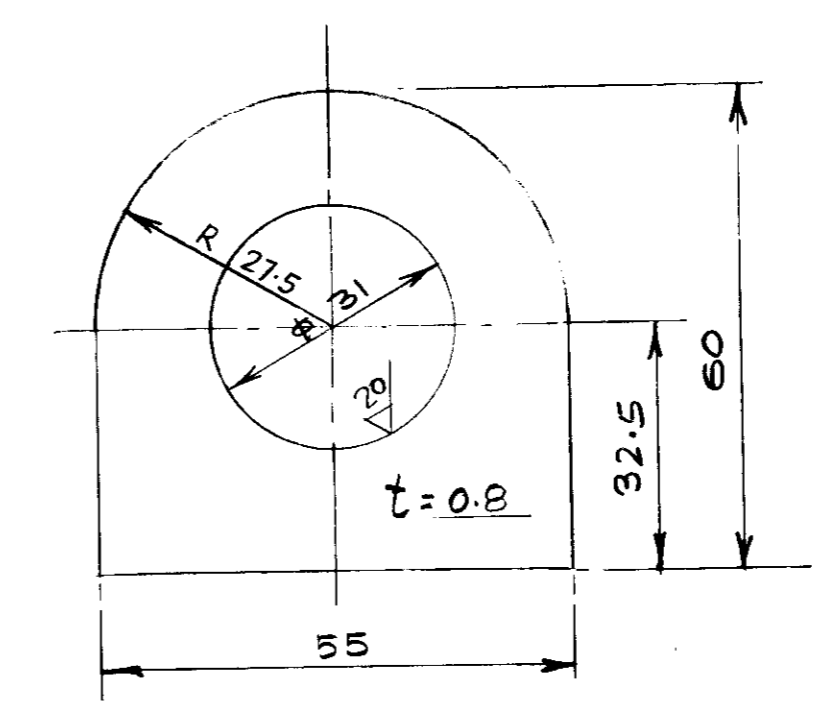


1. SHARP EDGES TO BE ROUNDED OFF.
2. ITEM TO BE HARDENED & TEMPERED TO HB 200-240.
3. HEAT TREATMENT AT ALL SURFACES IS REQUIRED, UP TO HRC 47-55 TO THE DEPTH OF 0.3-0.5mm.

REFERENCE: POLISH DRG NO 36823.03-11A,  
TPP DRG. NO. 167.001(N)/R/F-25

POS NO	DESCRIPTION	QTY	UNIT WT	MATERIAL	G.A. DRG No	SC	DRG. NO
P	$\phi 50/36-104$ SLEEVE	104	0.77	27Cr15 IS:5517-93	167.001(N) 00.065	1:1	167.001(N) 00.057

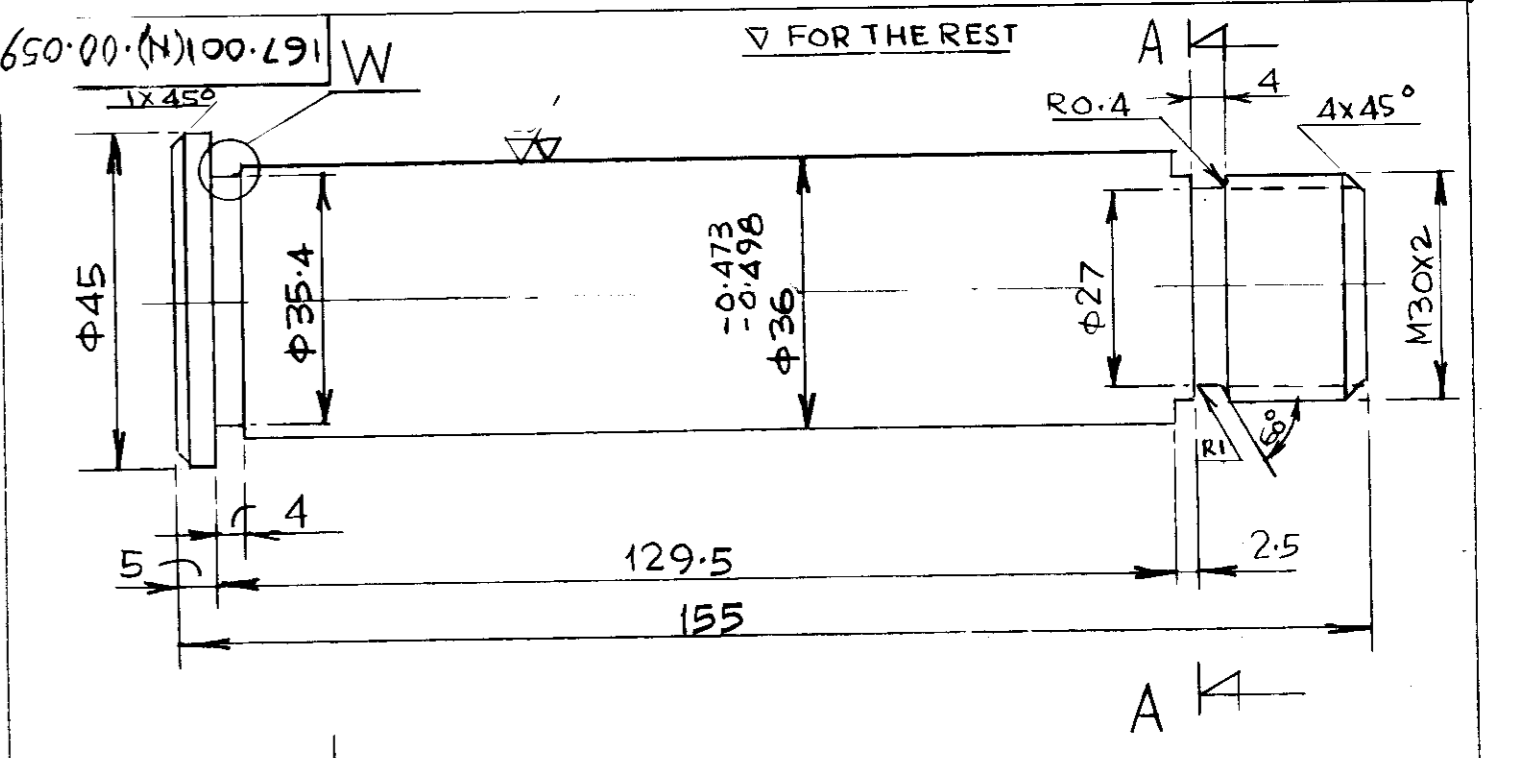
167.001(N)100.058



REFERENCE: POLISH DRG. NO. 3682303-14  
TPP DRG. NO. 167.001(N)/R/F-24A  
ROUND SHARP EDGES.

POS NO	DESCRIPTION	QTY	UNIT WT	MATERIAL	G.A. DRG No	SC	DRG NO
7	WASHER $08 \times 55 \times 60$	104	0.02	CRCA SHEET IS:513-86	167.001(N) 00.065	1:1	167.001(N) 00.058

167.001(N)100.059

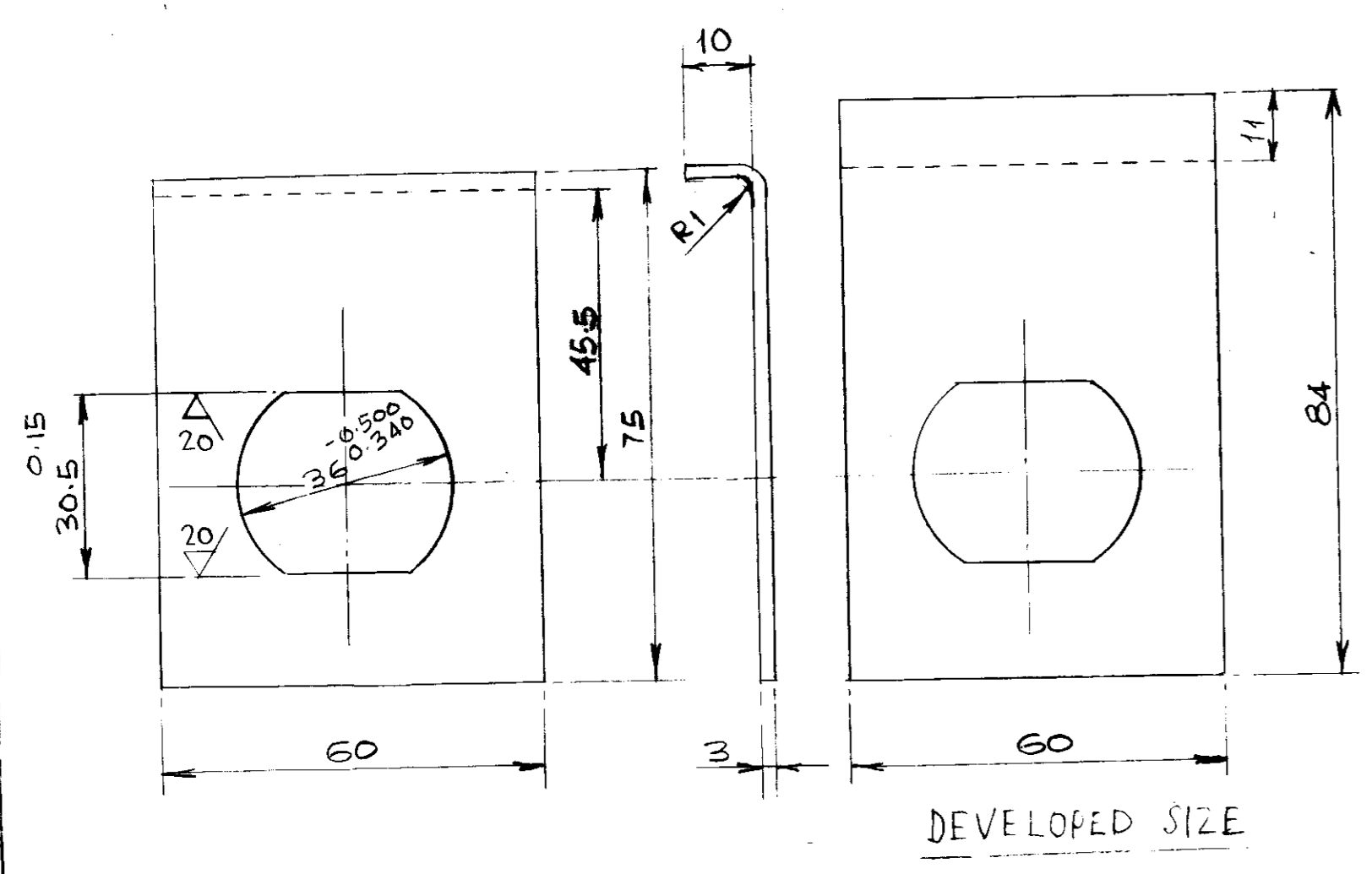


- TECHNICAL INSTRUCTION
1. FREE TOLERANCES TO BE AS PER MEDIUM CLASS OF IS:2102(PETIE'2)-93.
  2. SHARP EDGES TO BE ROUNDED OFF.
  3. ITEM TO BE HARDENED & TEMPERED TO HB 200-240.
  4. SURFACE OF  $\phi 36$  TO BE CASE CARBURISED TO RE 45-60. DEPTH OF HARDNESS TO BE 0.4 TO 0.6MM.

REFERENCE: POLISH DRG NO. 36823 03-10  
TPP DRG. NO. 167.001(N)/R/F-22

POS NO	DESCRIPTION	QTY	UNIT WT	MATERIAL	G.A. DRG No	SC	DRG NO
5	PIN	104	1.18	20Ni7Mo2 IS:4432-88	167.001(N) 00.065	1:1	167.001(N) 00.059

167.001(N)100.055

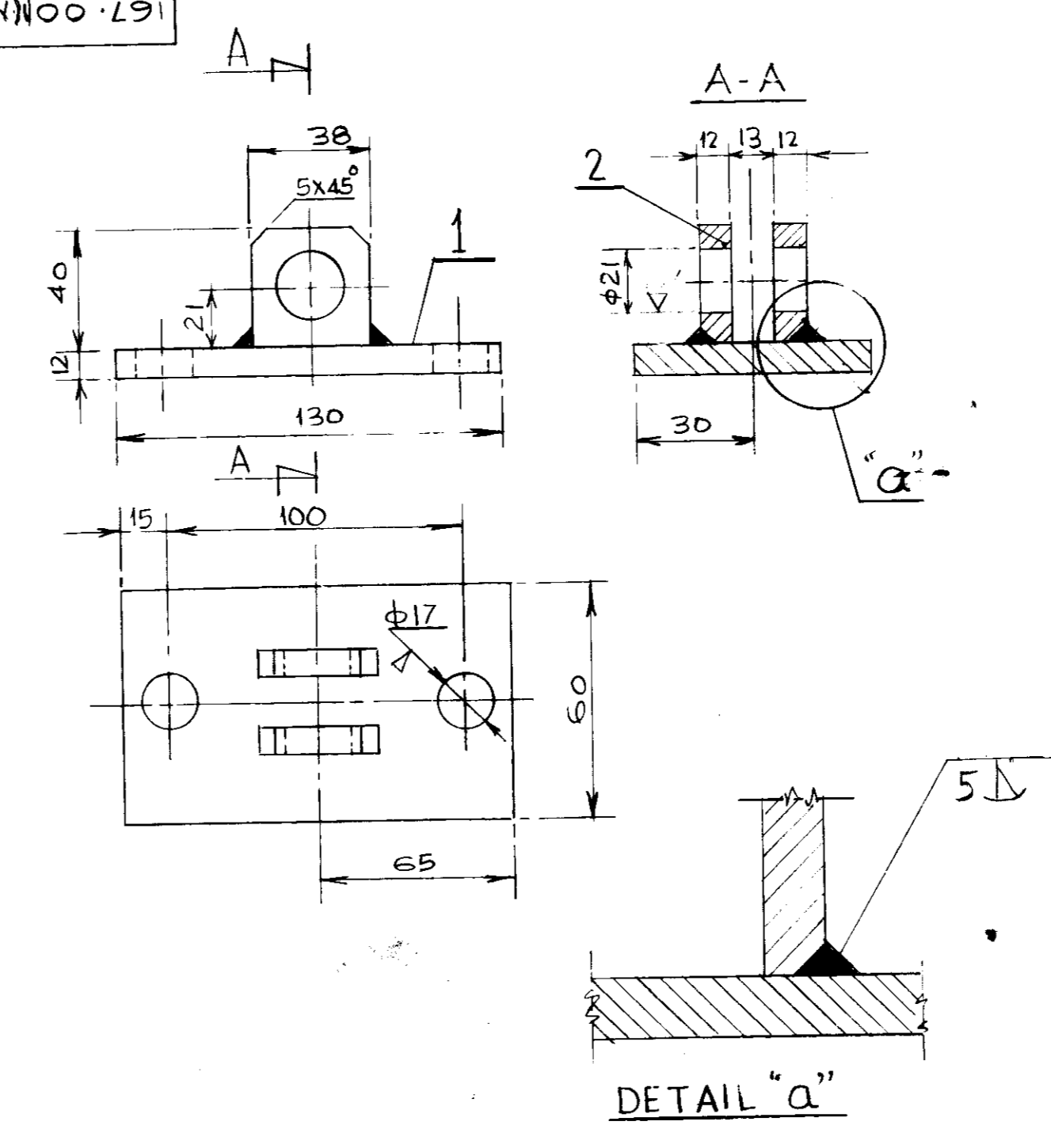


NOTE: 1. SHARP EDGES TO BE SMOOTH

REFERENCE: POLISH DRG. NO 3-6823 03-13  
TPP DRG. NO. 167.001(N)/R/F-23A

POS NO	DESCRIPTION	QTY	UNIT WT	MATERIAL	G.A. DRG No	SC	DRG. NO
6	PROTECT WASHER $60 \times 3 - 84$	104	0.092	CRCA SHEET IS:513-86	167.001(N) 00.065	1:1	167.001(N) 00.055

167.001(N)100.054



REFERENCE: POLISH DRG NO-3-6823-03-7 'a'  
TPP DRG. NO. 167.001(N)/R/F-21

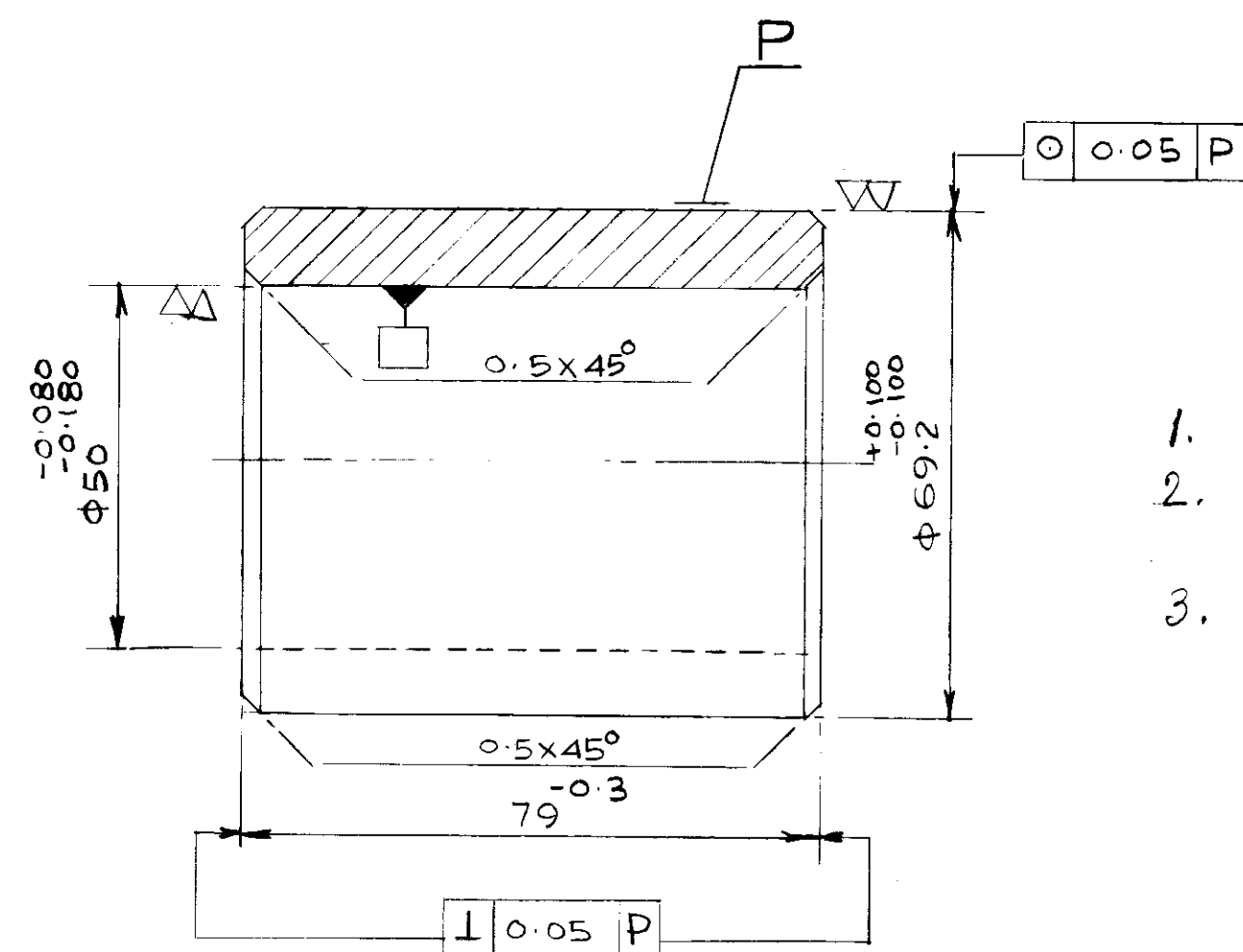
- TECHNICAL INSTRUCTION
1. WELDING TO BE DONE AS PER IS: 9595-80 WITH ELECTROD AWS E7018-1 IS: 814
  2. ITEM TO BE STRESS RELIEVED BEFORE DRILLING HOLES
  3. SHARP EDGES TO BE ROUNDED OFF

NOTE:  
1. DRY THE ELECTRODE AT 200°C FOR AT LEAST 1 HOUR BEFORE USE. CLEAN THE WELDABLE AREA COMPLETELY.

DRG NO	POS NO	DESCRIPTION	QTY	UNIT WT IN KG	TOTAL	MATERIAL	REMARKS
	3	ELECTRIC WELD		0.05		M-S	
	2	P. $40 \times 12$ , L=38	2	0.1	0.2	35C8 IS:5517-93	
	1	P. $60 \times 12$ , L=130	1	0.7	0.7	35C8 IS:5517-93	

POS NO	DESCRIPTION	QTY	UNIT WT KG	MATERIAL	G.A. DRG No	SC	DRG NO
9	CONNECTOR	52	0.92	ASSLY	167.001(N) 00.065	1:2	167.001(N) 00.054

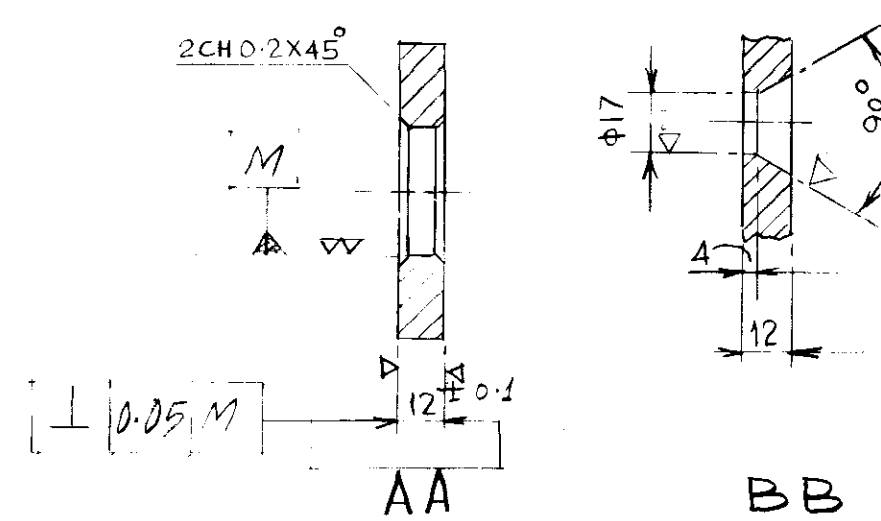
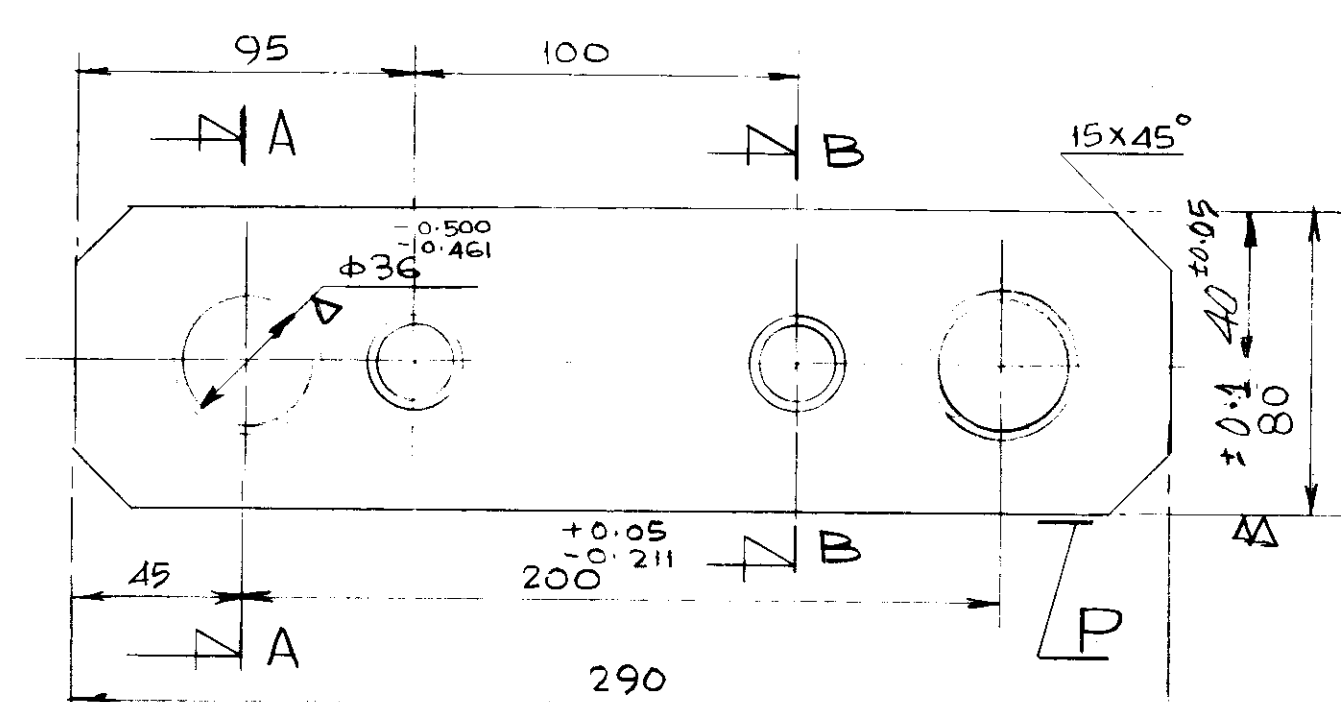
BOKARO STEEL PLANT				
SHOP	CAPTIVE POWER PLANT			
UNIT	R.C FEEDER			
DESCRIPTION OF DRAWING	DETAILS OF SCRAPER CHAIN OF RC FEEDER			
REVISIONS	DRAWN	S.N.SINGH	Sharda	DATE NOV-02
	CHECKED	J.P.SINGH	J.P.	JOB NO 10187
	RECOMND			167.001(N)-00
	SUBMITD			054 / 059
	APPROVED	K.N.JHA	qk	



- TECHNICAL INSTRUCTION.**
1. SHARP EDGES TO BE ROUNDED OFF.
  2. AFTER MACHINING ITEM TO HARDENED AND TEMPERED TO HB 220-250.
  3. SURFACE MARKED 'P' TO BE SURFACE HARDENED TO RC 47 TO 55 UP TO THE DEPTH OF 0.6 TO 1.0MM.

REFERENCE: POLISH DRG. NO 3-6823-03-12a  
 TPP DRG NO 167.001(N)/RCF-20

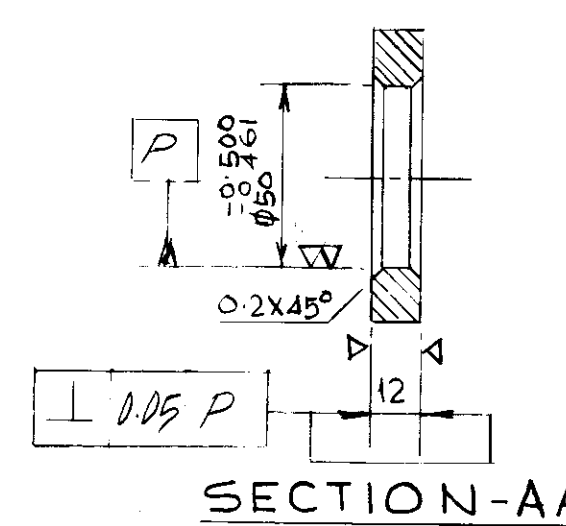
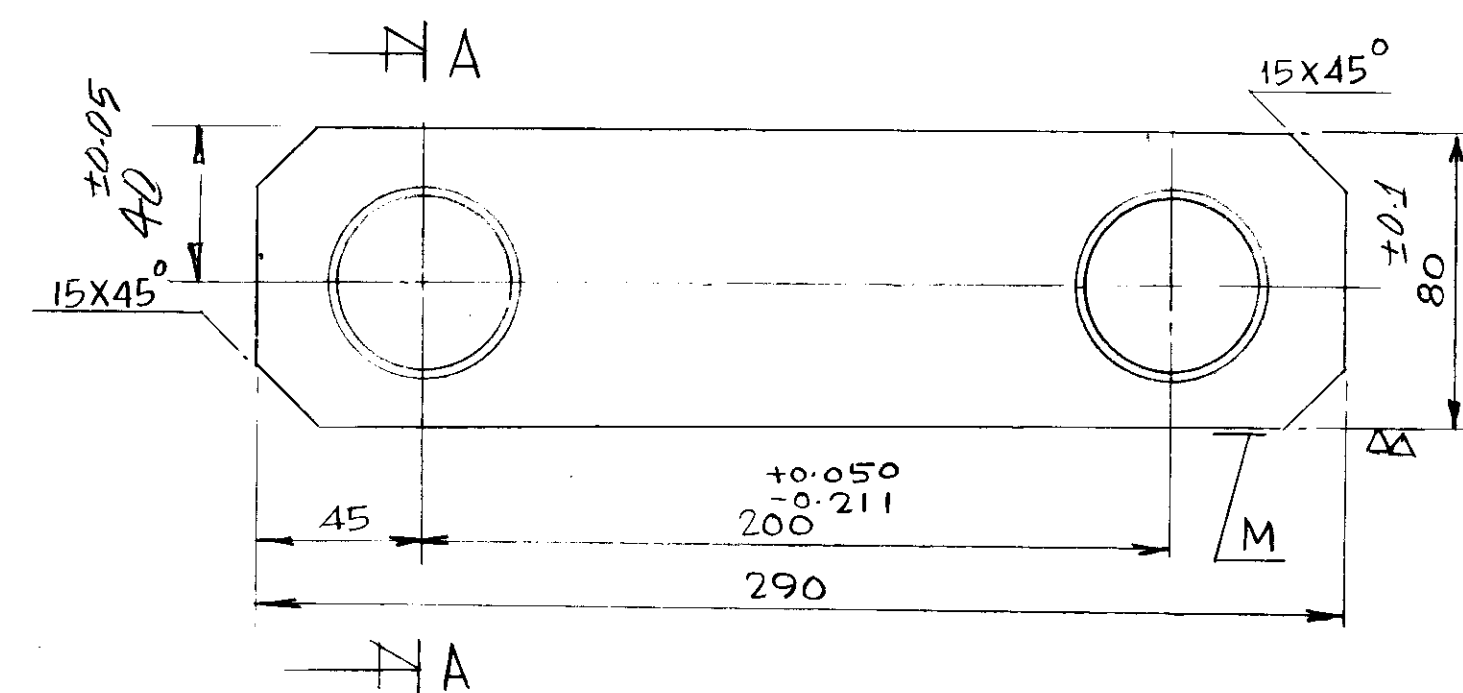
4	ROLLER	104	1.16	27C15 15.5517-93	167.001(N) 00.065	1:1	167.001(N) 00.062
POS NO	DESCRIPTION	QTY	UNIT WT	MATERIAL	G.A.DRG No	SC	DRG NO



- NOTES:-**
1. SHARP EDGES TO BE ROUNDED OFF.
  2. ITEM TO BE HARDENED AND TEMPERED TO HB 180-225.
  3. SURFACE MARKED 'P' TO BE SURFACE HARDENED TO RC 35-40. DEPTH OF HARDNESS TO BE 0.6 TO 1.0mm

REFERENCE: POLISH DRG. NO 3-6823-03-3b  
 TPP DRG NO 167.001(N)/RCF-17

1	OUT SIDE PLATE-I 80x12, L=290	52	1.9	45C8 15.5517-93	167.001(N) 00.065	1:2	167.001(N) 00.062
POS NO	DESCRIPTION	QTY	UNIT WT	MATERIAL	G.A.DRG No	SC	DRG NO

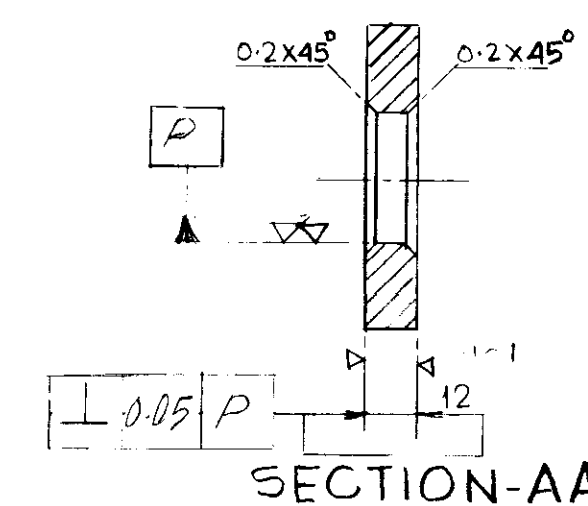
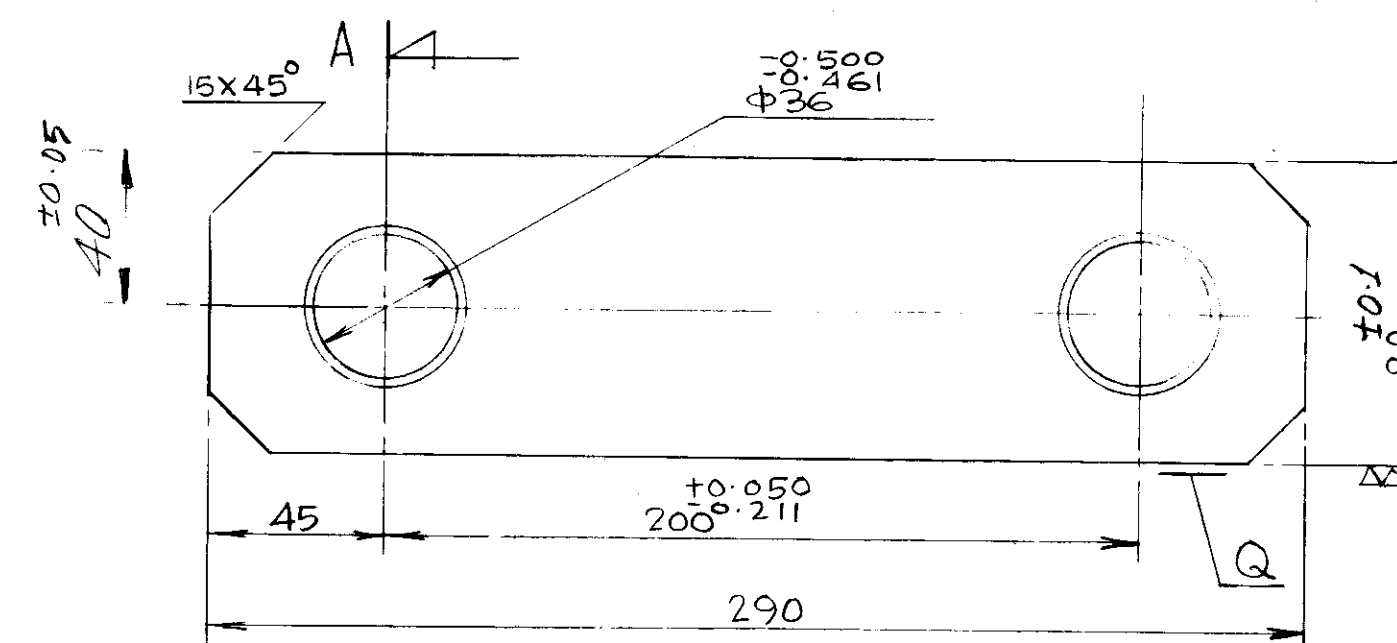


**NOTE:-**

1. SHARP EDGES TO BE ROUNDED OFF
2. ITEM TO BE HARDENED AND TEMPERED TO HB 180-225.
3. SURFACE MARKED 'M' TO BE SURFACE HARDENED TO RC 35-40. DEPTH OF HARDNESS TO BE 0.6-1.0mm.

REF:- POLISH DRG NO 3-6823-03-2'b  
 TPP DRG NO 167.001(N)/RCF-12.

3	INNER PLATE 80x12, L=290	104	1.77	45C8 15.5517-93	167.001(N) 00.065	1:2	167.001(N) 00.063
POS NO	DESCRIPTION	QTY	UNIT WT	MATERIAL	G.A.DRG No	SC	DRG NO



**NOTES:-**

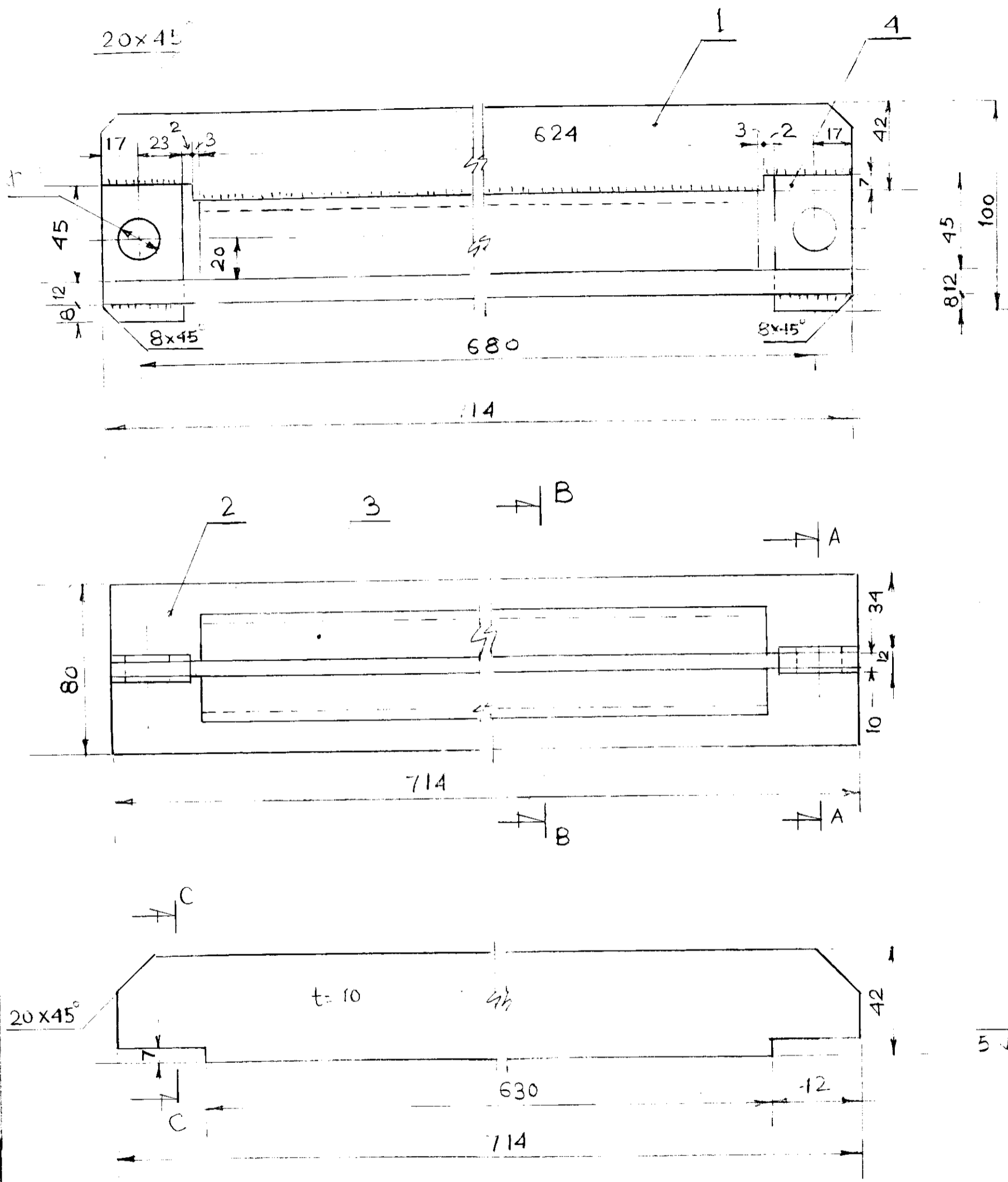
1. SHARP EDGES TO BE ROUNDED OFF
2. ITEM TO BE HARDENED AND TEMPERED TO HB 180-225
3. SURFACE MARKED 'Q' TO BE SURFACE HARDENED TO RC 35-40. DEPTH OF HARDNESS TO BE 0.6 TO 1.0mm.

2	PLATE -II 80x12, L=290	52	1.9	45C8 15.5517-93	167.001(N) 00.065	1:2	167.001(N) 00.060
POS NO	DESCRIPTION	QTY	UNIT WT	MATERIAL	G.A.DRG No	SC	DRG NO

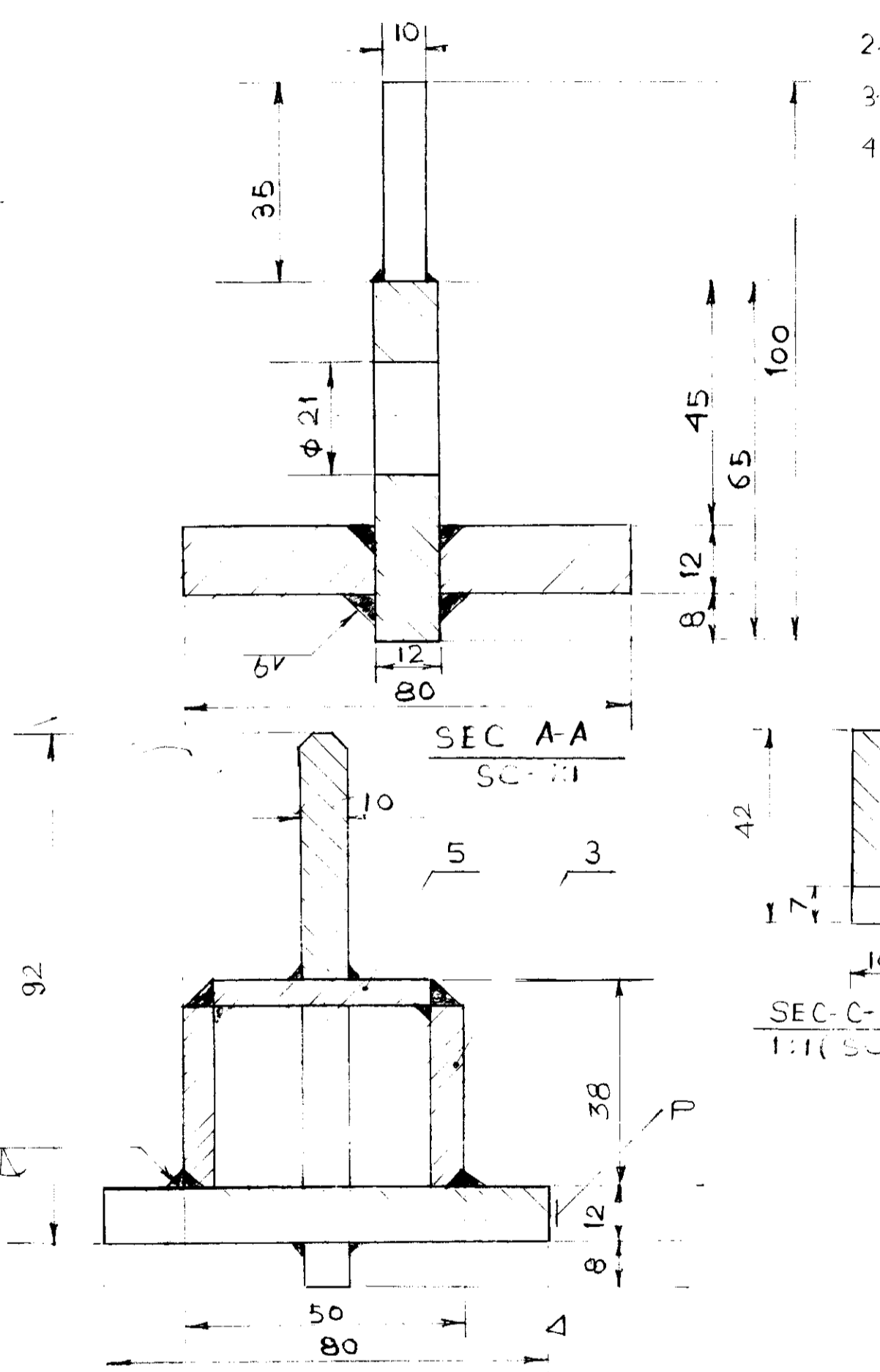
<b>BOKARO STEEL PLANT</b>					
SHOP CAPTIVE POWER PLANT					
UNIT R.C. FEEDER					
DESCRIPTION OF DRAWING DETAILS OF SCRAPER CHAN OF R.C FEEDER					
REVISION	DRAWN	S.N.SINGH	Sharda	DATE	NOV-02
	CHECKED	J.P.SINGH	J.P.	JOB NO	10127
	SUBMITTED				
	RECOMND				167.001(N).00
	APPROVED	K.N.THA	gjh		060 ÷ 063

REFERENCE: POLISH DRG. NO 3-6823-03-8b  
 TPP DRG NO 167.001(N)/RCF-13

167.001(N).00.064



ITEM NO.1  
SC. I.2



SEC B-B  
SC. II

TECHNICAL REQUIREMENTS

- 1 WELDING TO BE DONE AS PER IS 595-80 WITH LOW HYDROGEN AWS E 7018 OR EQUIVALENT.
- 2 ITEM TO BE STRESS RELIEVED BEFORE DRILLING HOLES.
- 3 SHARP EDGES TO BE ROUNDED OFF.
- 4 SURFACE MARKED BY 'P' TO BE SURFACE HARDENED TO RC 35-40. DEPTH OF HARDNESS TO BE 0.6 TO 1MM.

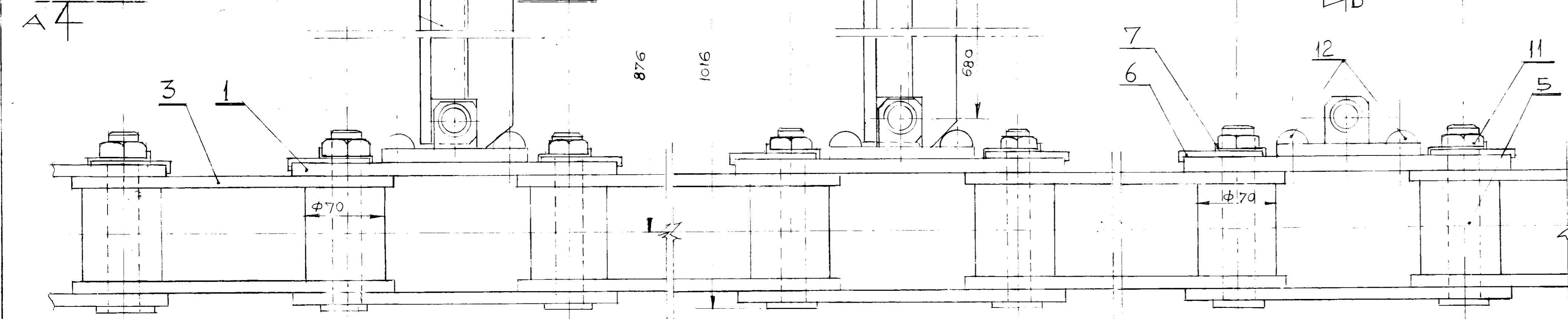
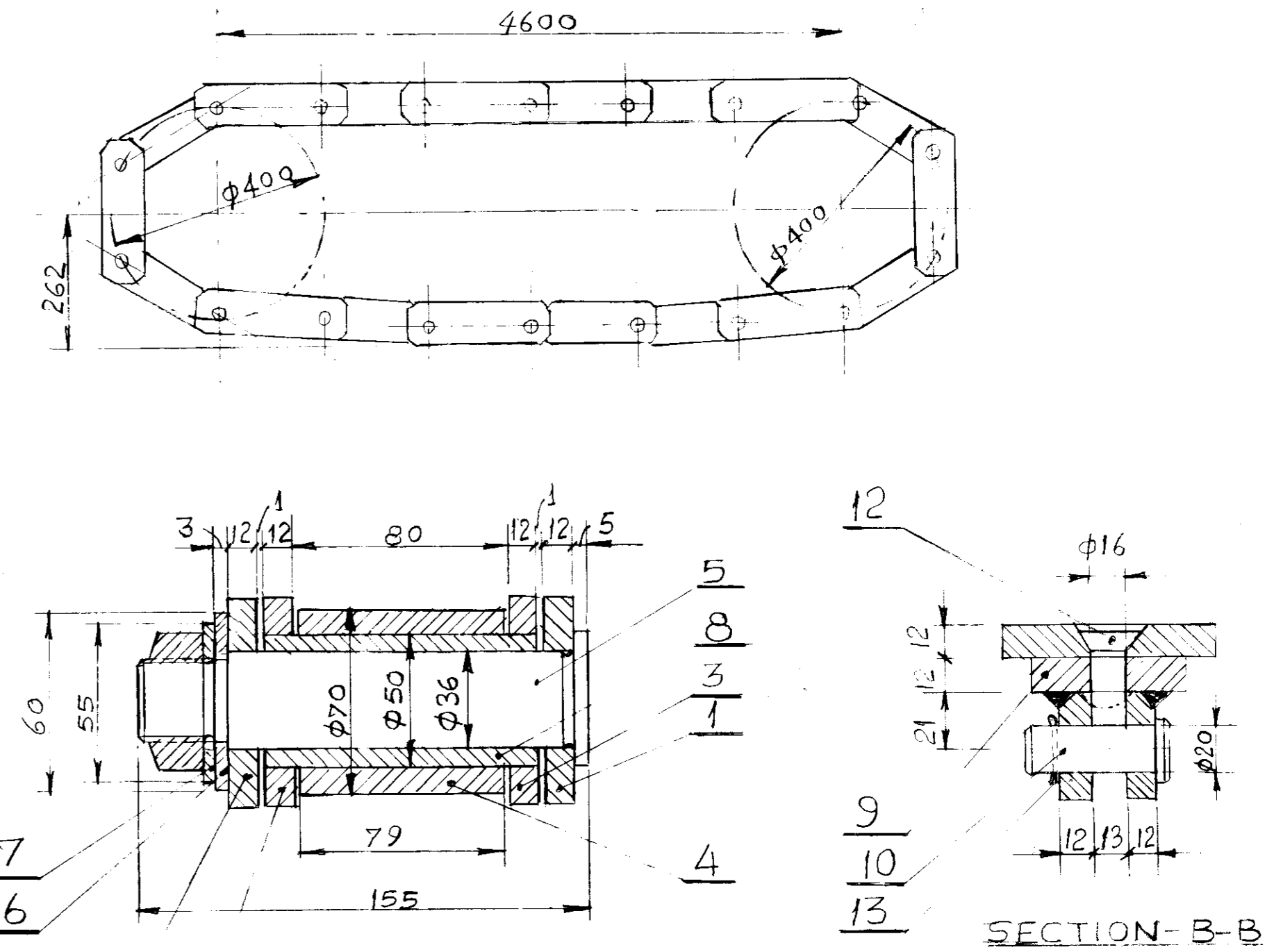
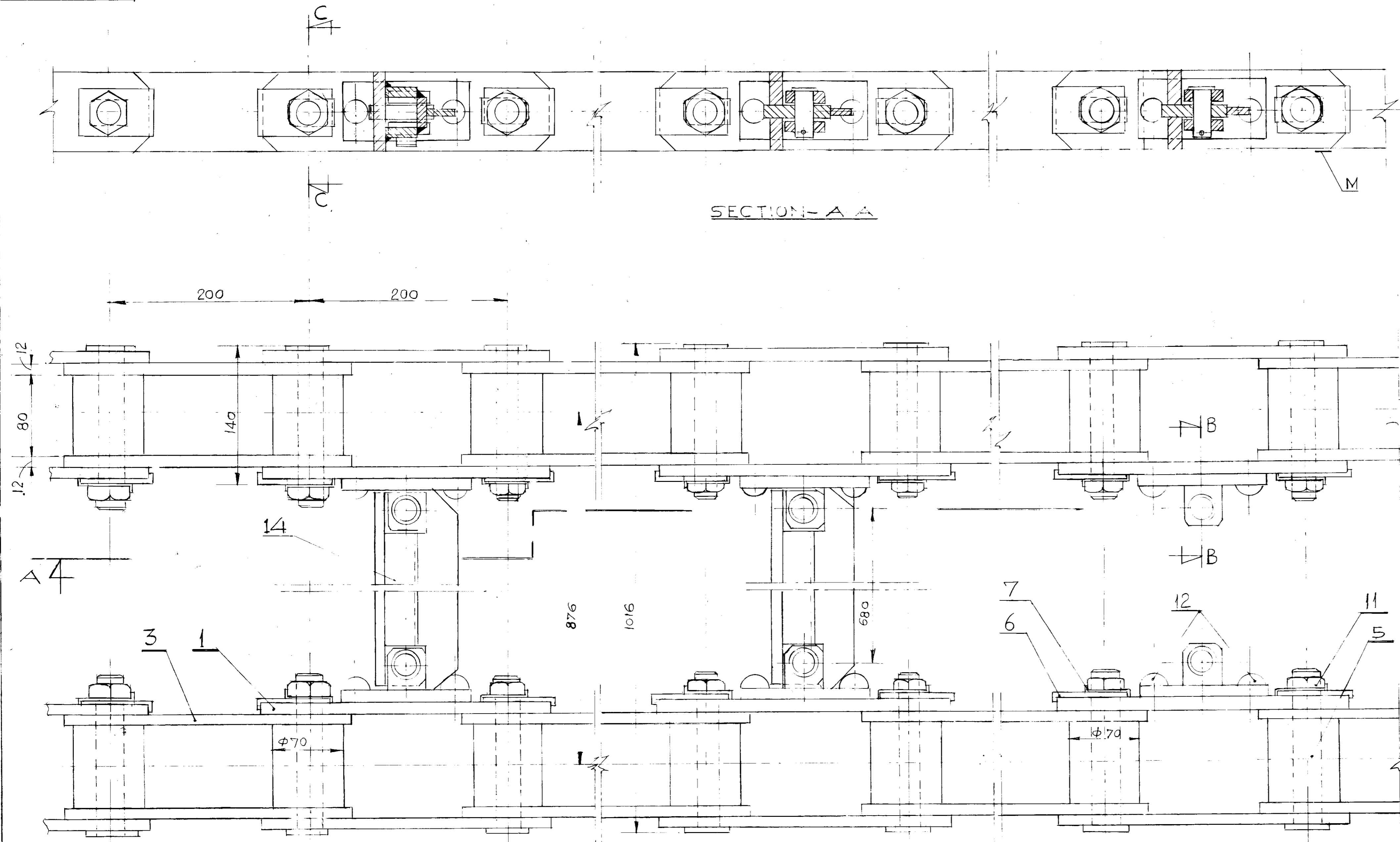
NOTE

POS. NO. 385 TO BE WELDED TOGETHER TO FORM CHANNEL OF LENGTH 624 MM.

DRG. NO.	POS. NO.	DESCRIPTION	QTY	UNIT WT. IN KG	TOTAL	MATERIAL	REMARKS
		WELD METAL			9.2		
	5	PL. 34x6, L=624	1	1.6	1.6	35CS IS: 5517-93	
	4	PL. 40x12, L=65	2	0.2	0.4	35CS IS: 5517-93	
	3	PL. 28x8, L=624	2	1.1	2.2	35CS IS: 5517-93	
	2	PL. 80x12, L=714	1	5.0	5.2	45CS IS: 5517-93	
	1	PL. 42/10, L=714	1	2.2	2.2	35CS IS: 5517-93	

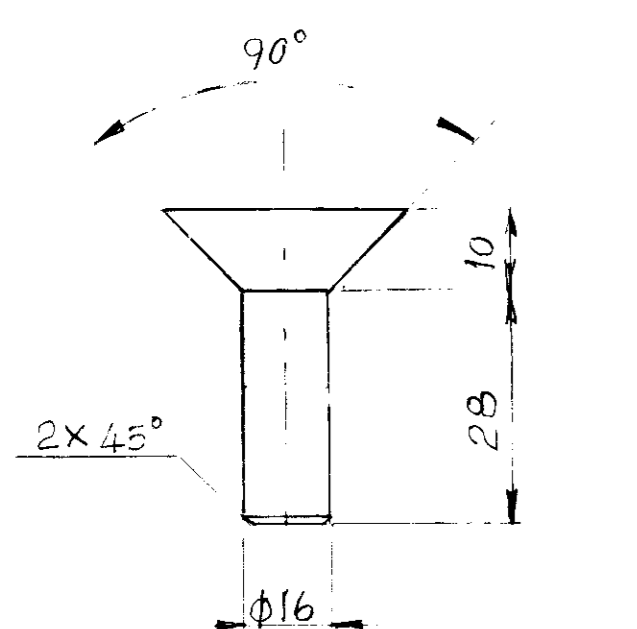
14	DESCRIPTION	QTY	UNIT WT. IN KG	MATERIAL	G. ASSLY. DRG. NO.	SC	DRG. NO.
	SCRAPPER	26	11.8	ASSLY	167.001(N).00.065	-	167.001(N).00.064

BOKARO STEEL PLANT	
SHOP	CAPTIVE POWER PLANT
UNIT	R. C. FEEDER-DPR NO. 167.001(N)
DESCRIPTION OF DRAWING	DETAIL OF SCRAPPER
REVISIONS	DRAWN: MDEAINDDM, IMP. DATE: DEC 2002
	CHECKED: J.P.K., JOB NO: 16137
	SUBMITTED: J.P.K.,
	RECOMND:
	APPROVED: K.N.JHA, 167.001(N).00.064



TOTAL LENGTH OF CHAIN = 10400 (APPRX.)  
 REF. DRG. NO. 167-001(N)/RCP-012A

DRG. NO.	POS. NO.	DESCRIPTION	QTY.	UNIT	MATERIAL	REMARKS
167-001(N) 00-064	14	SCRAPPER	26	11.8	3068	ASSEMBLY
IS:549-74		SPLIT PIN $\phi 4 \times 40$	52	0.02	104	HALF ROUND WIRE IS:8563-77
IS:1929-82		RIVET NP 16x38	104	0.1	10.4	HP STEEL RIVET BAR, IS:1143-82
IS:1364 (PART) 00-056		LOCK NUT M30x2	52	0.1	5.2	STEEL CLASS 4 IS:1364 (PART) 1950
167-001(N) 00-054		PIN $\phi 20, L=61$	52	0.14	72.8	45CB, IS:5517-93
167-001(N) 00-057		CONNECTOR 60x120x12	52	0.95	49.4	LY.
167-001(N) 00-058		SLEEVE	104	0.77	80.08	27 C15, IS:5517-93
167-001(N) 00-055		WASHER 55x60x3	104	0.02	2.04	CRCA SHEET IS:513-1986
167-001(N) 00-059		PROTEC WASHER 60x84x3	104	0.02	2.04	CRCA SHEET IS:513-1986
167-001(N) 00-062		PIN $\phi 36 \times 155$	104	1.18	118.5	20MnMo2, IS:4432-93
167-001(N) 00-063		ROLLER	104	1.16	120.6	27 C15, IS:5517-93
167-001(N) 00-060		IN SIDE PLATE-II 80x270x12	104	1.77	184.0	45 CB, IS:5517-93
167-001(N) 00-061		OUT SIDE PLATE-I 80x270x12	52	1.9	98.2	45 CB, IS:5517-93
167-001(N) 00-060		OUT SIDE PLATE-II 80x270x12	52	1.9	98.2	45 CB, IS:5517-93
DRG. NO.	POS. NO.	DESCRIPTION	QTY.	UNIT	MATERIAL	REMARKS



DETAIL OF POS. NO. 12

**CAUTION**

- MATERIAL TESTING:**  
FROM BOTH THE SIDES OF CHAIN 2 TO 8 CHAIN LINKS TO BE COLLECTED AT RANDOM & PUT ON BREAKING LOAD TEST IT SHOULD WITHSTAND A TENSILE FORCE OF AT LEAST 45000N (45 TONNE)
- ASSEMBLY INSTRUCTION:** SURFACE OF POS NO. 1, 2, 3, & 14 TREATED TO CASE/ SURFACE HARDENING TO BE MARKED BY SYMBOL 'RC' AND CARE SHOULD BE TAKEN TO KEEP THESE SURFACES TO BOTTOM FACE MARKED BY 'M'.
- IN INSTALLATION OF CHAIN,** THE FACE 'M' TO BE KEPT ON DRAGGING/ SCRAPPING SURFACE.

ASSEMBLED TO  
 P.K. SINGHA  
 ASST. (MECH)-T.P.

POS. NO.	DESCRIPTION	QTY.	UNIT	MATERIAL	REMARKS
-	SCRAPPER CHAIN	1	1048	ASSEMBLY	167-001(N) 00-065

SHOP	BOKARO STEEL PLANT
UNIT	CAPTIVE POWER PLANT
DESCRIPTION OF DRG.	R.C. FEEDER (167/001)
REVISIONS.	TRIP/D M.P. LAKRA CHECKED J.P. SINGHA SUBMTD RECOMND APPROVED K.N. JHA
DATE	DEC-02
JOB NO.	10187
167-001(N) 00-065	